

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/085243 A2

(51) International Patent Classification⁷: C07D 457/00

(21) International Application Number:
PCT/HU2005/000022

(22) International Filing Date: 2 March 2005 (02.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
P 0400517 4 March 2004 (04.03.2004) HU

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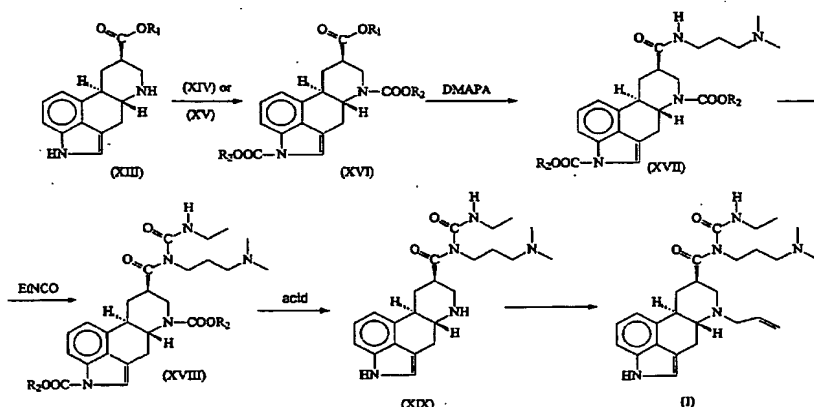
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: NOVEL PROCESS FOR PRODUCTION OF CABERGOLINE



(57) Abstract: A process for preparing cabergoline (I) from ergoline-8β-carboxylic acid ester (XIII) comprising the following steps. (a) reacting an ergoline-8β-carboxylic acid ester of formula (XIII), wherein R₁ represents a C₁₋₄ alkyl group, in the presence of a catalyst (i) with a compound of formula (XIV), X-COOR₂ (XIV) wherein R₂ is an optionally substituted straight or branched C₁₋₆ alkyl group, X represents a bromine or chlorine atom, or (ii) with a compound of formula (XV), O(COOR₂)₂ (XV) wherein R₂ is a group as defined above; (b) reacting the obtained carbamate derivative of formula (XVI) with 3-(dimethylamino)-propylamine (DMAPA) in the presence of a catalyst; (c) reacting the obtained ergoline-8β-carboxamide derivative of formula (XVII) with ethyl isocyanate (EtNCO) in the presence of ligand(s) and Ib and IIb metal group salt catalysts; (d) reacting the obtained protected N-acylurea derivative of formula (XVIII) with a strong aqueous inorganic acid (aq/acid); (e) reacting the obtained secondary amine (XIX) with an electrophyl allyl alcohol derivative in the presence of a palladium or nickel containing catalyst and optionally in the presence of ligand(s) to form cabergoline (I). The intermediates of (XVI), (XVII), (XVIII) and (XIX) are novel. The polymorphic amorphous form of Cabergoline (I) and the production thereof.



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

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ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

- *without international search report and to be republished upon receipt of that report*

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